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TITLE: Pneumatic spring arrangement for a vehicle comprises an air

chamber of a second pneumatic spring with a second inner

pressure arranged within the air chamber of a first

pneumatic spring with a first inner pressure

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ABSTRACTED-PUB-NO: EP 1429045A

BASIC-ABSTRACT:

NOVELTY - Pneumatic spring arrangement (1) for a vehicle comprises a first and a second pneumatic spring (2, 3) arranged in parallel. Each pneumatic spring consists of a bellows (4, 5) made of elastomer material and provided especially with an embedded strength support. The bellows form a tube (10, 11) surrounding an air chamber (12, 13). Each pneumatic spring also consists of a cover (6, 7) with a connecting region for the end of the bellows, and a roller piston (8, 9) with a connecting region for the other end of the bellows and a free rolling surface for the tube. The air chamber (13) of the second pneumatic spring (3) with a second inner pressure (p2) is arranged within the air chamber (12) of the first pneumatic spring (2) with a first inner pressure (p1). The two air chambers communicate via an overflow line (14) and a pressure system so that the second inner pressure is greater than the first inner pressure.

DETAILED DESCRIPTION - Preferred Features: The pressure system is a compressor (15) integrated in the overflow line. The compressor is combined with a valve block (27).

USE - For a vehicle.

ADVANTAGE - The pneumatic <u>spring</u> arrangement is suitable for use in general vehicle construction (cars, utility vehicles, rail vehicles) and under the production of greater forces within smaller construction spaces.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a pneumatic **spring** arrangement with a compressor.

pneumatic spring arrangement 1

pneumatic spring 2, 3

bellows 4, 5

cover 6, 7

roller piston 8, 9.

tube 10, 11

air chamber 12, 13

overflow line 14

compressor 15

valve block 27

inner pressure p1 , p2

CHOSEN-

Dwg.1/2

DRAWING:

TITLE-

PNEUMATIC **SPRING** ARRANGE VEHICLE COMPRISE **AIR** CHAMBER

TERMS:

SECOND PNEUMATIC SPRING SECOND INNER PRESSURE ARRANGE AIR

CHAMBER FIRST PNEUMATIC SPRING FIRST INNER PRESSURE

DERWENT-CLASS: Q12 Q63

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